PTO/SB/05 (03-01)
Approved for use through 10/31/2002. OMB 0651-0032
U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

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## UTILITY **PATENT APPLICATION TRANSMITTAL**

(Only for new nonprovisional applications under 37 CFR 1.53(b))

Attorney Docket No.		Y03S013-US	
First Inventor		Hitoshi FUJIMIYA	
Title	Computer software program for graphically displaying genetic linkage unbalances, and the method thereof		
Express Mail I abel No.		EU450417016US	

APPLICATION ELEMENTS See MPEP chapter 600 concerning utility patent application contents.		cation contents.	Assistant Commissioner for Patents Box Patent Application Washington, D.C. 20231				
1. (Sc	ee Transmittal Form (e.g., PTO/SB/1 ubmit an original, and a duplicate for fee pr pplicant claims small entity status.		7. CD-ROM or CD-R in duplicate, large table or Computer Program (Appendix)  8. Nucleotide and/or Amino Acid Sequence Submission				
	ee 37 CFR 1.27.		(if applicable, all necessary)				
	pecification [Total Pag referred arrangement set forth below)	es 20 ]	a. Computer Readable Form (CRF)				
- 0	Descriptive title of the invention		b. Specification Sequence Listing on:				
	Cross Reference to Related Applicati Statement Regarding Fed sponsored		i. CD-ROM or CD-R (2 copies); or				
- F	Reference to sequence listing, a table or a computer program listing append	э,	ii. 📘 paper				
- E	Background of the Invention		c. Statements verifying identity of above copies				
	Brief Summary of the Invention Brief Description of the Drawings <i>(if fil</i>	ed)	ACCOMPANYING APPLICATION PARTS				
	Detailed Description Claim(s)		9. Assignment Papers (cover sheet & document(s))				
	Abstract of the Disclosure		10. 37 CFR 3.73(b) Statement (when there is an assignee) Power of Attorney				
. 🖂 -			11. English Translation Document (if applicable)				
4. 🗸 Dr	rawing(s) (35 U.S.C. 113) [Total She	eets 7 ]	12. Information Disclosure Copies of IDS Statement (IDS)/PTO-1449 Citations				
5. Oath or D	<del> </del>	· · ·	13. Preliminary Amendment				
a. [	Newly executed (original or co	• • • •	14. Return Receipt Postcard (MPEP 503) (Should be specifically itemized)				
b.	Copy from a prior application (for continuation/divisional with Bo.		Certified Copy of Priority Document(s) (if foreign priority is claimed)				
	i. DELĘTION QF INVEŅ		Nonpublication Request under 35 U.S.C. 122				
	Signed statement attached named in the prior applica		(b)(2)(B)(i). Applicant must attach form PTO/SB/35 or its equivalent.				
1.63(d)(2) and 1.33(b).  6. Application Data Sheet. See 37 CFR 1.76			17. Other: EXPRESS MAIL FOREIGN PRIORITY CLAIMED				
	ONTINUING APPLICATION, check ap ation Data Sheet under 37 CFR 1.76:	propriate box, and s	upply the requisite information below and in a preliminary amendment,				
		ontinuation-in-par	rt (CIP) of prior application No.:				
	application information: Examiner		Group / Art Unit:				
under Box 5b	b, is considered a part of the disclosur	e of the accompan	e of the prior application, from which an oath or declaration is supplied ying continuation or divisional application and is hereby incorporated by s been inadvertently omitted from the submitted application parts.				
reference. The	19		NDENCE ADDRESS				
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Customer Number or Bar Code Label (Insert Customer No. of Attack			or X Correspondence address below				
	Konomi Takeshita	Justonier Monoritatio	(a) Dar (b) (a) (a) (a) (a) (a) (a) (a) (a) (a) (a				
Name							
Address Omori & Yaguchi USA, LLC							
	Eight Penn Center, Suite 1360, 1628	John F. Kennedy	Boulevard				
City	Philadelphia	State	PA Zip Code 19103				
Country	U.S.A.	Telephone	215 701-6349   Fax   215 701-6351				
Name	(Print/Type) Konomi Takeshita	7	Registration No. (Attorney/Agent) 38333				
Signate	ure Kman (	abolition	- Date 1/21/04				
December 11acca C	Statement: This familie estimated to take	- 0.0 haven to some	intota. Time will your depending upon the peeds if the inflictional case. As				

Burden Hour Statement: This form is estimated to take 0.2 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Box Patent Application, Washington, DC 20231.

PTO/SB/17 (10-03)

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## **FEE TRANSMITTAL** for FY 2004

Effective 10/01/2003. Patent fees are subject to annual revision.

✓ Applicant claims small entity status. See 37 CFR 1.27

**TOTAL AMOUNT OF PAYMENT** 

12)	471
l W I	711

Complete if Known				
Application Number Herewith				
Filing Date	Herewith			
First Named Inventor	Fujimiya, Hitoshi			
Examiner Name	Not Known			
Art Unit	Not Known			
Attorney Docket No.	Y03S013-US			

Fee	METHOD OF PAYMENT (check all that apply)	FEE CALCULATION (continued)					
Deposit Account:	Check Credit card Money Other None 3	3. ADDITIONAL FEES					
Code (s)	Deposit Account:						
	Denosit I					Fee Description	Fee Paid
Cocount Name   Chronic & Yaguchi USA, LLC   1053   130   1053   130   1054   1055   130   130   1055   130   1055   130   130   1055   130   1055   130   130   1055   130   130   1055   130   130   1055   130   1055   130   130   1055   130   130   1055   130   130   1055   130   130   1055   130   130   1055   130   130   1055   130		1051 13	30	2051	65	Surcharge - late filing fee or oath	
The Director is authorized to: (check all that apphy)   1053   130   1053   130   1054   130   1055   130   130   1055   130   130   1055   130   130   1055   130   130   1055   130	Account Omori & Yaguchi USA, LLC	1052	50	2052	25		
Charge fee(s) indicated below		1053 13	30	1053	130	Non-English specification	
Charge any additional fee(s) or any underpayment of fee(s)  Charge fee(s) indicated below, except for the filling fee to the above-identified deposit account.  FEE CALCULATION  1. BASIC FILING FEE Large Entity Small Entity Fee Fee Fee Fee Fee Fee Paid (s) Code (s)  Code (s)		1812 2,5	520	1812 2	2,520	For filing a request for ex parte reexamination	
Charge fee(s) indicated below, except for the filling fee to the above-identified deposit account.		1804 9	920*	1804	920*		
Substotal   Subs	Charge fee(s) indicated below, except for the filing fee	1805 1 8	840*	1805	1 840*		
1. BASIC FILING FEE   Large Entity   Small Entity   Fee		1000 1,0	"	1000	1,040		
1. BASIC FILING FEE   Large Entity   Small Entity   Fee	FEE CALCULATION	1251 1	110			• •	
Fee   Fee   Fee   Fee   Fee   Fee   Fee   Fee   Description   Fee   Paid	1. BASIC FILING FEE				210	Extension for reply within second month	
Code (\$)	Large Litary Ginan Citary	1253 9	950		475	Extension for reply within third month	
1002 340   2002 170   Design filing fee   385   1401 330   2401 165 Notice of Appeal   1402 330   2402 165 Filing a brief in support of an appeal   1403 290 2403 145 Request for oral hearing   1403 290 240 240 280 2803 240 2803 290 240 280 2803 290 2403 145 860 240 280 2803 2802 240 2803 2802 240 2803 2802 240 2803 2803 2803 2803 28		1254 1,4	480	2254	740	Extension for reply within fourth month	
1401   330   2401   165   Notice of Appeal   1401   330   2401   165   Notice of Appeal   1401   330   2401   165   Notice of Appeal   1401   330   2402   165   Notice of Appeal   1401   165   Notice of Appeal   1402   165   Notice of Appeal   1402   1402   145   1402   1402   145   1402   1405	1001 770 2001 385 Utility filing fee	1255 2,0	010	2255	1,005	Extension for reply within fifth month	
1004 770   2004 385   Reissue filing fee   1403 290   2403 145   Request for oral hearing   1451 1,510   Provisional filing fee   1452 110   2452 55   Provisional filing fee   1453 1,330   Provisional filing fee   1453 1,310   Provisional fee (or reissue)   1453 1,330   Provisional fee (or reissue)   1502 480 2502 240   Design issue fee   1503 640 2503 320   Provisional fee (or reissue)   1450 1,330 640 2503 320   Provisional fee (or reissue)   1450 1,330 640 2503 320   Provisional fee (or reissue)   1450 1,330 640 2503 320   Provisional fee (or reissue)   1450 1,330 640 2503 320   Provisional fee (or reissue)   1450 1,330 640 2503 320   Provisional fee (or reissue)   1450 1,330 640 2503 320   Provisional fee (or reissue)   1450 1,330 640 2503 320   Provisional fee (or reissue)   1450 1,330 640 2503 320   Provisional fee (or reissue)   1450 1,330 640 2503 320   Provisional fee (or reissue)   1450 1,330 640 2503 320   Provisional fee (or reissue)   1450 1,330 640 2503 320   Provisional fee (or reissue)   1450 1,330 640 2503 320   Provisional fee (or reissue)   1450 1,330 640 2503 320   Provisional fee (or reissue)   1450 1,330 640 2503 320   Provisional fee (or reissue)   1450 1,330 640 2503 320   Provisional fee (or reissue)		1401 3	330	2401	165	Notice of Appeal	
1005   160   2005   80   Provisional filling fee	1003 530 2003 265 Plant filing fee	1402 3	330	2402	165	Filing a brief in support of an appeal	
SUBTOTAL (1) (\$) 385	1004 770 2004 385 Reissue filing fee	1403 2	290	2403	145	Request for oral hearing	
2. EXTRA CLAIM FEES FOR UTILITY AND REISSUE Fee from Judgendent Total Claims Independent Claims Multiple Dependent Large Entity Fee Fee Code (\$) 1202 18 2202 9 Claims in excess of 20 1201 86 2201 43 Independent claims in excess of 3 1203 290 2203 145 Multiple dependent claims over original patent Substorial (\$) 86  1453 1,330 2453 665 Petition to revive - unintentional 1501 1,330 2501 665 Utility issue fee (or reissue) 1502 480 2503 320 Plant issue fee 1503 640 130 Petitions to the Commissioner 1806 180 Submission of Information Disclosure Stmt 1806 180 Submission of Information Disclosure Stmt 8021 40 8021	1005 160 2005 80 Provisional filing fee	1451 1,5	510	1451	1,510	Petition to institute a public use proceeding	
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Total Claims		1453 1,3	330	2453	665	Petition to revive - unintentional	
Total Claims	Fee from	•	_ I		665	Utility issue fee (or reissue)	
Independent Claims Multiple Dependent  Large Entity Small Entity Fee Fee Fee Code (\$)  1202 18 2202 9 Claims in excess of 20 1201 86 2201 43 Independent claims in excess of 3  1203 290 2203 145 Multiple dependent claims over original patent  1204 86 2204 43 "Reissue independent claims over original patent  1205 18 2205 9 "Reissue claims in excess of 20 and over original patent  SUBTOTAL (2) (\$) 86  1503 640 2503 320 Plant issue fee 1460 130 Petitions to the Commissioner 1807 50 Processing fee under 37 CFR 1.17(q)  1806 180 Submission of Information Disclosure Stmt 8021 40 Recording each patent assignment per property (times number of properties) 1809 770 2809 385 Filing a submission after final rejection (37 CFR 1.129(a)) 1810 770 2810 385 For each additional invention to be examined (37 CFR 1.129(b)) 1801 770 2801 385 Request for Continued Examination (RCE) 1802 900 1802 900 Request for expedited examination of a design application  Other fee (specify)	Total Claims 17 nove - 0 v					_	
Multiple Dependent  Large Entity   Small Entity   Fee   Fee   Fee   Fee   Fee   Fee   Code (\$)    1202   18   2202   9   Claims in excess of 20    1201   86   2201   43   Independent claims in excess of 3    1203   290   2203   145   Multiple dependent claims in excess of 3    1204   86   2204   43   ** Reissue independent claims over original patent    1205   18   2205   9   ** Reissue claims in excess of 20 and over original patent    SUBTOTAL (2)   (\$) 86    1807   50   1807   50   Processing fee under 37 CFR 1.17(q)    1808   180   Submission of Information Disclosure Stmt    8021   40   8021   40   Recording each patent assignment per property (times number of properties)    1809   770   2809   385   Filing a submission after final rejection (37 CFR 1.129(a))    1810   770   2810   385   For each additional invention to be examined (37 CFR 1.129(b))    1801   770   2801   385   Request for Continued Examination (RCE)    1805   1807   1808   1809   1	Independent 5 2*** D V 13 186						
Large Entity   Small Entity   Fee   Fee   Fee   Fee   Fee   Code (\$)    1202   18   2202   9   Claims in excess of 20    1203   290   2203   145   Multiple dependent claims in excess of 3    1204   86   2204   43   ** Reissue independent claims over original patent    1205   18   2205   9   ** Reissue claims in excess of 20 and over original patent    1205   18   2205   9   ** Reissue claims in excess of 20 and over original patent    1207   1807   50   1807   50   Processing fee under 37 CFR 1.17(q)    1808   180   Submission of Information Disclosure Stmt    8021   40   8021   40   Recording each patent assignment per property (times number of properties)    1809   770   2809   385   Filing a submission after final rejection (37 CFR 1.129(a))    1810   770   2810   385   For each additional invention to be examined (37 CFR 1.129(b))    1801   770   2801   385   Request for Continued Examination (RCE)    1801   770   2801   385   Request for expedited examination of a design application    1802   900   1802   900   Request for expedited examination of a design application    1804   770   2807   385   Request for expedited examination of a design application    1805   1807   50   1807	Multiple Dependent		· 1	1460	130	Petitions to the Commissioner	
Fee Code (\$)		1807	50	1807	50	Processing fee under 37 CFR 1.17(q)	
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1202   18   2202   9   Claims in excess of 20   1809   770   2809   385   Filing a submission after final rejection (37 CFR 1.129(a))   1203   290   2203   145   Multiple dependent claim, if not paid   1204   86   2204   43   ** Reissue independent claims over original patent   1801   770   2801   385   For each additional invention to be examined (37 CFR 1.129(b))   1801   770   2801   385   For each additional invention to be examined (37 CFR 1.129(b))   1801   770   2801   385   Request for Continued Examination (RCE)   1802   900   1802   900   Request for expedited examination of a design application   Other fee (specify)   1802   900   180	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	8021	40	8021	40	property (times number of properties)	
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1205 18 2205 9 ** Reissue claims in excess of 20 and over original patent 1801 770 2801 385 Request for Continued Examination (RCE)  1802 900 Request for expedited examination of a design application  Other fee (specify)		1810 7	770	2810	385		
and over original patent of a design application  SUBTOTAL (2) (\$) 86  Other fee (specify)		1801 7	770	2801	385	' ''	
SUBIOTAL (2) ((5) 00		1802 9	900	1802	900		
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**or number previously paid, if greater; For Reissues, see above *Reduced by Basic Filing Fee Paid SUBTOTAL (3) (\$)		*Reduced	d by I	Basic F	Filing F	ee Paid SUBTOTAL (3) (\$)	

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SUBMITTED BY				(Complete (	(if applicable))
Name (Print/Type)	Konomi Takeshita	Registration No. (Attorney/Agent)	38,333	Telephone	215 701-6349
Signature	Some Calentito			Date	1/21/04

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This collection of information is required by 37 CFR 1.17 and 1.27. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of: Hitoshi Fujimiya et al.	) Docket Number: ) Y03S013-US
Serial No.: Not known	) )
Filed: Herewith	) Group art Unit: Not known
FOR: COMPUTER SOFTWARE PROGRAM FOR GRAPHICALLY DISPLAYING GENETIC LINKAC UNBALANCES, AND THE METHOD THEREOF	) GE) )
Commissioner for Patents Mail Stop Patent Application P.O. Box 1450 Alexandria, VA 22313-1450	
Transmittal Lette	e <u>r</u>
Date of Deposit: January 21, 2004	
I hereby certify that the following attached papers and fe	e:
<ol> <li>Utility Patent Application Transmittal Sheet;</li> <li>Fee Transmittal sheet;</li> <li>Patent Application consisting of: 20 pages of</li> <li>7 Formal Drawing Sheets;</li> <li>Assignment and Assignment Record Cover S</li> <li>Checks in the amounts of \$471.00 (for filing)</li> <li>Application Data Sheet;</li> <li>Declaration; and</li> <li>Postcard</li> </ol>	heet;
are being deposited with United States Postal Service "E the Commissioner for Patents, Mail Stop Patent Applicat 22313-1450.	-
Kurara Yamagishi Typed or Printed Name	

Thur Jeneyile Signature